Creepy, Crawly Leaf-Munchers

By Susan Camp

Our friend, Harry, recently asked my husband if I could find out why he hadn't seen many tent caterpillars this year. When I started researching the topic, I discovered that I didn't know much about leaf-devouring critters, and I suspect that I am not the only one. I am certain that our friend, with his many years of gardening and farming experience, knew exactly which caterpillar he was referring to. For the rest of us, here is some information I hope will prove helpful.

People often refer to all caterpillars that build nests in trees as "bagworms", but bagworms (Thyrodopteryx ephaemeraeformis) primarily infest evergreens like Leyland cypress and Eastern red cedar, along with some hardwoods. The bags resemble upside-down ice cream cones and contain bits of evergreen needles and leaves. Bagworms can kill a tree.

The Eastern tent caterpillar (Malacosoma americanum) is a species native to much of the United States and southern Canada. Eggs overwinter in an egg mass that encircles a twig and looks as though it has been shellacked. Larvae emerge in early spring and begin to spin their silken nests in the forks of branches, enlarging the nests as they grow. Favorite trees include apple, black cherry, and chokecherry, but hawthorn, oak, maple, poplar, and other trees also provide food. Larvae leave their nests during the day to feed on young leaves and return at night. They also stay inside on rainy days. Larvae are brown and hairy with a white stripe bordered by yellowish-brown lines running down the back and a row of blue dots on each side. After four to six weeks, the mature caterpillars crawl to secluded places to spin their cocoons. Adult moths, which are reddish-brown with two light diagonal stripes on each forewing, emerge three to four weeks later.

Fall webworms (Hyphantria cunea) often are confused with Eastern tent caterpillars. Fall webworms appear in August and September. Female moths lay their pale green eggs, encased in hairy masses, on the undersides of leaves between May and July. Eggs hatch within two to three weeks and larvae spin their webs on the ends of branches. The maturing larvae remain in the webs, which may grow to three feet in length. Larvae are yellowish-green with long, gray hairs and a black stripe with a yellow stripe on either side running down the back. The head may be black or red. Mature larvae leave the nest to spin their cocoons. Moths are either all white or white with black spots. A curious characteristic of fall webworms is the jerky line dance they perform in unison when disturbed.

Both species of caterpillars are classified as ornamental pests. Healthy host trees rarely are killed by the feasting larvae, but the webs and defoliation are unsightly. Missouri Botanical Garden entries "Eastern tent caterpillar" and "Fall webworm" suggest several strategies for dealing with the unwelcome visitors. Homeowners can learn to live with the hungry critters, knowing that leaves usually grow back. Parasitic wasps and other predaceous insects feed on the caterpillars and should be encouraged. Unless the tree is very tall, tent caterpillar egg masses can be removed

by hand during the winter and the webs of both species pruned out. Bacillus thuringiensis (Bt), an organic insecticide, can be applied when webs first develop.

We can now identify the creepy, crawly caterpillars in our trees next summer and fall, but we still don't know for sure why they show up in greater numbers in some years. There is evidence that weather conditions play a part in determining how many eggs hatch each year. Several articles mentioned that populations fluctuate greatly from year to year, with major infestations occurring every few years.

Virginia Cooperative Extension (VCE) Publications ENTO-92NP "Eastern Tent Caterpillar" and 2808-1013 "Fall Webworm" both contain information on these annoying pests. VCE Publications and Educational Resources "Caterpillars" is an online gallery containing color photographs of many larval defoliators.

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